

# INTERNATIONAL SEARCH REPORT

International application No  
PCT/IB 03/04400

| <b>A. CLASSIFICATION OF SUBJECT MATTER</b><br>IPC 7 G06T1/00 H04N1/32   |   |  |
|---|---|--|
| According to International Patent Classification (IPC) or to both national classification and IPC   |   |  |
| <b>B. FIELDS SEARCHED</b><br>Minimum documentation searched (classification system followed by classification symbols)<br>IPC 7 G06T H04N   |   |  |
| Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched   |   |  |
| Electronic data base consulted during the international search (name of data base and, where practical, search terms used)<br>EPO-Internal, WPI Data, INSPEC, PAJ   |   |  |
| <b>C. DOCUMENTS CONSIDERED TO BE RELEVANT</b>   |   |  |
| Category *  | Citation of document, with indication, where appropriate, of the relevant passages  | Relevant to claim No.  |
| A   | WO 02 39714 A (DIGIMARC CORP ;TIAN JUN (US)) 16 May 2002 (2002-05-16)<br>page 10, line 20 - line 30<br>page 13, line 7 - line 12  | 1-21   |
| A   | ULUDAG U ET AL: "Robust watermarking of busy images"<br>SECURITY AND WATERMARKING OF MULTIMEDIA CONTENTS III, SAN JOSE, CA, USA, 22-25 JAN. 2001,<br>vol. 4314, pages 18-25, XP002269224<br>Proceedings of the SPIE - The International Society for Optical Engineering, 2001, SPIE-Int. Soc. Opt. Eng, USA<br>ISSN: 0277-786X<br>Section 2<br>Eqs. 3,4,5 | 1-21   |
| -/-   |   |  |
| <input checked="" type="checkbox"/> Further documents are listed in the continuation of box C. <input checked="" type="checkbox"/> Patent family members are listed in annex.   |   |  |
| * Special categories of cited documents :<br>"A" document defining the general state of the art which is not considered to be of particular relevance<br>"E" earlier document but published on or after the international filing date<br>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)<br>"O" document referring to an oral disclosure, use, exhibition or other means<br>"P" document published prior to the international filing date but later than the priority date claimed<br>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention<br>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone<br>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.<br>"&" document member of the same patent family |   |  |
| Date of the actual completion of the international search<br><br>6 February 2004  |   | Date of mailing of the international search report<br><br>23/02/2004 |
| Name and mailing address of the ISA<br>European Patent Office, P.B. 5818 Patentlaan 2<br>NL - 2280 HV Rijswijk<br>Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,<br>Fax (+31-70) 340-3016   |   | Authorized officer<br><br>dos Santos, L                              |

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/IB 03/04400

## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

| Category * | Citation of document, with indication, where appropriate, of the relevant passages   | Relevant to claim No. |
|------------|--|-----------------------|
| A          | <p>PENG YIN ET AL: "Semi-fragile watermarking system for MPEG video authentication"<br/>2002 IEEE INTERNATIONAL CONFERENCE ON ACOUSTICS, SPEECH, AND SIGNAL PROCESSING. PROCEEDINGS (CAT. NO.02CH37334), ORLANDO, FL, USA, 13-17 MAY 2002, pages IV3461-IV3464 vol.4, XP002269225 2002, Piscataway, NJ, USA, IEEE, USA ISBN: 0-7803-7402-9<br/>page 3462, right-hand column, paragraphs 1,2<br/>figure 2</p> | 1-21                  |
| A          | <p>BAUDRY S ET AL: "Channel coding in video watermarking: use of soft decoding to improve the watermark retrieval"<br/>ICIP00, vol. 3, 10 September 2000 (2000-09-10), pages 25-28, XP010529394<br/>Section 3</p>  | 1-21                  |
| A          | <p>EP 0 984 616 A (NIPPON TELEGRAPH &amp; TELEPHONE) 8 March 2000 (2000-03-08)<br/>abstract<br/>page 8 -page 11</p>  | 1-21                  |
| A          | <p>BARNI M ET AL: "A new decoder for the optimum recovery of nonadditive watermarks"<br/>IEEE TRANSACTIONS ON IMAGE PROCESSING, MAY 2001, IEEE, USA, vol. 10, no. 5, pages 755-766, XP002269226<br/>ISSN: 1057-7149<br/>Section III-B</p>  | 1-21                  |

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/IB 03/04400

| Patent document<br>cited in search report | Publication<br>date | Patent family<br>member(s) | Publication<br>date |
|---|---------------------|----------------------------|---------------------|
| WO 0239714 A                              | 16-05-2002          | AU 1461302 A               | 21-05-2002          |
|   |                     | WO 0239714 A2              | 16-05-2002          |
|   |                     | US 2002146123 A1           | 10-10-2002          |
| EP 0984616 A                              | 08-03-2000          | EP 0984616 A2              | 08-03-2000          |
|   |                     | JP 2001016438 A            | 19-01-2001          |